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Declaration under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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(54) **Title:** LOW PRESSURE SPERM CELL SEPARATION SYSTEM

(57) **Abstract:** A sperm cell process system providing to generate sperm cell insemination samples having controlled sperm cell fertility characteristics of sperm cells.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 1/02; G01N 1/30, 33/48; C07K 1/00; A61B 17/43, A61D 7/00

US CL : 435/2, 40.51; 530/827, 852; 600/33, 35

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : ((

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAPLUS, MEDLINE, EMBASE, BIOSIS, LIFESCI**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| Y | PENFOLD, L.M. et al. Comparative Motility of X and Y Chromosome-Bearing Bovine Sperm Separated on the basis of DNA Content. Mol. Reprod. and Develop. 1998, Vol 50, pages 323-327, see entire document. | 1-16, 24, 25, 27, 28, 30, 31, 39-54, 58-60 |
| Y | BEYHAN, Z. et al. Sexual Dimorphism in IVF-IVF Bovine Embryos Produced From X and Y Chromosome-Bearing Spermatozoa Sorted by High Speed Flow Cytometry. Theriogenology. 1999, Vol. 52, pages 35-48, see entire document. | 1-16, 23-25, 27, 28, 30, 31, 33, 34, 36, 37, 39-61 |
| Y | RATHI, R. et al. Evaluation of In Vitro Capacitation of Stallion Spermatozoa. Biology of Reproduction. 2001, Vol. 65, pages 462-470, see entire document. | 1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61 |
| Y | BUCHANAN, B.R. et al. Insemination of Mares with Low Numbers of Either Unsexed or Sexed Spermatozoa. Theriogenology. 2000, Vol. 53, pages 1333-1344, see entire document. | 1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61 |

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